

Listing of Claims

1. (Currently Amended) A data transfer controlling method in a radio system which transmits and receives data in an acknowledgement mode, the method comprising:
receiving data units having serial numbers lying in a range of a receiving window;
transmitting window size control information from a receiver to a transmitter based on a state of a receiving buffer that corresponds to the receiving window; and
varying a transmitting window size of the transmitter according to the transmitted window size control information, wherein ~~acknowledgment information is transmitted simultaneously with~~ the window size control information includes window size upward setting information, window size maintaining information, window size downward setting information, and is transmitted simultaneously with, the acknowledgment information ~~controlling transmission of additional data from the transmitter to the receiver based on the varied transmitting window size.~~
2. (Original) The method of claim 1, wherein the transmitter is a network and the receiver is a terminal.
3. (Currently Amended) The method of claim 1, wherein the window size control information is contained in status information ~~thus~~ to be transmitted.

4. (Original) The method of claim 1, wherein the window size control information is a window size super-field (SUFI).

5. (Original) The method of claim 3, wherein the status information further includes an ACK SUFI.

6. (Currently Amended) The method of claim 1, wherein the receiver adjusts the [[a]] receiving window size to be the same as the transmitting window size.

7. (Currently Amended) The method of claim 1, wherein the window size control information includes window size downward setting information if the [[a]] receiving buffer is in an overflow state.

8. (Original) The method of claim 7, wherein the downward set window size is 1.

9. (Currently Amended) The method of claim 1, wherein the window size control information includes window size upward setting information if the [[a]] receiving buffer is not in an overflow state.

10. (Original) The method of claim 9, wherein the upward setting level is up to an upper limit.

11. (Currently Amended) A data transfer controlling method in a radio system which controls a flow of a radio link and includes an entity operated in an acknowledgement mode, wherein window size update information is transmitted from a receiving entity to a transmitting entity based on a processing speed by the receiving entity of data units stored in a receiving buffer,

wherein acknowledgment information is transmitted simultaneously with the window size update information, the acknowledgment information controlling transmission of additional data units from the transmitting entity to the receiving entity, transmission of the additional data units controlled based on the window size update information, and

wherein the window size control information includes window size upward setting information, window size maintaining information, window size downward setting information.

12. (Previously Presented) The method of claim 11, wherein the entity is a radio link control (RLC) entity.

13. (Original) The method of claim 11, wherein the receiving entity adjusts a receiving window size to be the same as a transmitting window size.

14. (Original) The method of claim 11, wherein the window size update information is transmitted through status information.

15. (Previously Presented) The method of claim 11, wherein the window size update information is included in a window size super-field (SUFI).

16. (Original) The method of claim 14, wherein the status information includes an ACK SUFI.

17. (Original) The method of claim 11, wherein the receiving entity determines a change of a window size according to a state of a receiving buffer.

18. (Currently Amended) The method of claim 17, wherein the receiving entity adjusts the [[a]] window size to be downward set in case that data more than a certain level remain on the receiving buffer.

19. (Original) The method of claim 18, wherein the downward set window size is 1.

20. (Currently Amended) The method of claim 17, wherein the receiving entity adjusts the [[a]] window size to be upward set in case that data more than a certain level do not remain on the receiving buffer.

21. (Original) The method of claim 20, wherein the upward setting level is up to an upper limit.

22. (Currently Amended) A data transfer controlling method in a radio data transfer of a mobile communication system, the method comprising:

receiving one or more [[a]] protocol data units (PDUs) from a transmitting radio link control (RLC) entity;

checking a state of a receiving buffer for storing the one or more PDUs;

transmitting window size control information to the transmitting RLC according to the state of the receiving buffer; the window size control information to vary a transmitting window size of the transmitting RLC entity for transmitting additional PDUs to be stored in the receiving buffer, wherein acknowledgment information is transmitted simultaneously with the window size control information, the acknowledgment information controlling transmission of said additional PDUs based on the varied transmitting window size,

wherein the window size control information includes window size upward setting information, window size maintaining information, window size downward setting information..

23. (Currently Amended) The method of claim 22, wherein a receiving RLC entity adjusts a receiving window size to be the same as the transmitting window size.

24. (Original) The method of claim 22, wherein the window size control information includes window size downward setting information if the receiving buffer is in an overflow state.

25. (Original) The method of claim 24, wherein the downward set window size is 1.

26. (Original) The method of claim 22, wherein the window size control information is a window size SUFI.

27. (Original) The method of claim 22, wherein the window size control information is transmitted through status information.

28. (Original) The method of claim 27, wherein the status information is an ACK signal.

29. (Original) The method of claim 28, wherein the ACK signal includes an ACK SUFI.

30. (Original) The method of claim 22, wherein the window size control information includes window size upward setting information if the receiving buffer is not in an overflow state.

31. (Original) The method of claim 30, wherein the upward setting level is up to an upper limit.

32. (Previously Presented) The method of claim 1, wherein the acknowledgement information is included in a first super-field and the window size control information is included in a second super-field, the first and second super-fields transmitted simultaneously within a status protocol data unit (PDU) from the receiver to the transmitter.

33. (Currently Amended) The method of claim 1, wherein the transmitting window is varied to a size which allows previously received data stored in the receiving buffer to be arranged in sequence without said additional data units ~~from the transmitted~~ being lost in the receiving buffer.

34. (Previously Presented) The method of claim 1, further comprising:
adjusting a window size of the receiving buffer based on the window size control information.

35. (Previously Presented) The method of claim 34, wherein the varied window size of the receiving buffer is adjusted to be equal the transmitting window size varied based on the window size control information.